

Recreational Opportunities at the Arthur R. Marshall Loxahatchee National Wildlife Refuge

Recreation Issues Workshop of the Water
Resources Advisory Commission (WRAC)
December 16, 2013

Mission of the U.S. Fish and Wildlife Service, National Wildlife Refuge System

- “to administer a national network of lands and waters for the conservation, management, and where appropriate restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”



Purpose of the Arthur R. Marshall Loxahatchee

National Wildlife Refuge.

- “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds”. 16 U.S.C. 715d (Fish and Wildlife Coordination Act).
- “...shall be administered by him [Secretary of Interior] directly or in accordance with cooperative agreements... and in accordance with such rules and regulations for the conservation, maintenance and management of wildlife, resources thereof, and its habitat thereon.” 16 U.S.C. 664 (Fish and Wildlife Coordination Act).



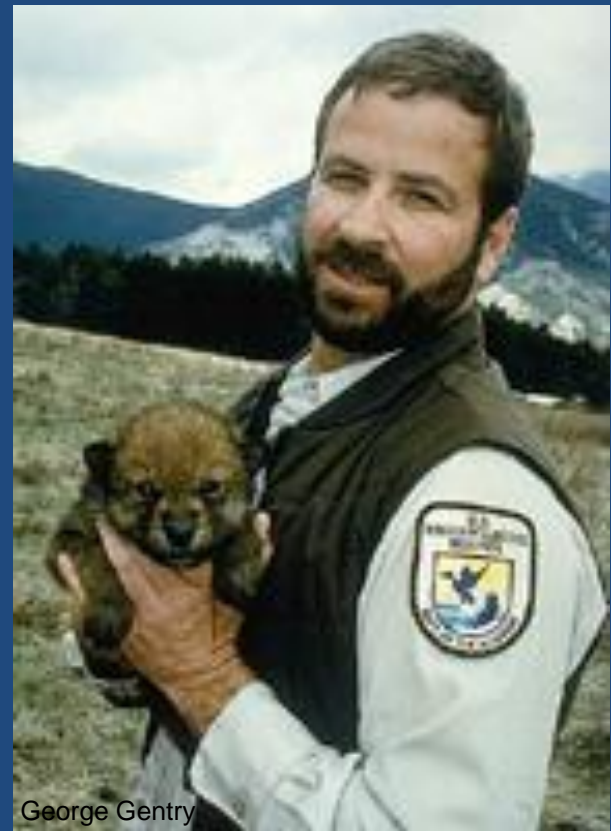
National Wildlife Refuge System

Improvement Act of 1997

- Amended the National Wildlife Refuge System Administration Act of 1966 to improve the management of the System and for other purposes.
- Identified compatible wildlife-dependent recreation as a legitimate and appropriate general public use of the System.
- Compatible wildlife-dependent recreational uses are the priority general public uses of the System and shall receive priority consideration in refuge planning and management.
- Six Priority Public Uses. Hunting, Fishing, Wildlife Observation, Interpretation, Environmental Education, and Wildlife Photography.

National Wildlife Refuges

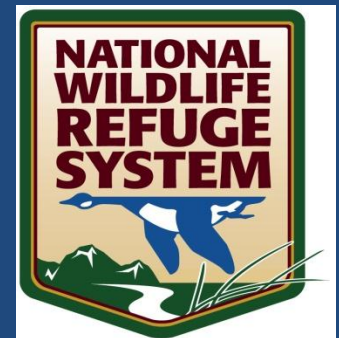
- National Wildlife Refuges are the only system of federal lands established specifically for wildlife protection.
- Refuge managers are trained biologists, and management activities are based on sound science.



George Gentry

National Wildlife Refuge System

- Administered by the U.S. Fish and Wildlife Service (USFWS) under the Department of the Interior
- Began with 3-acre island in 1903, now expands over 150 million acres within 556 National Wildlife Refuges and 37 Wetland Management Districts across the Nation



National Wildlife Refuge System



Lance
Warley



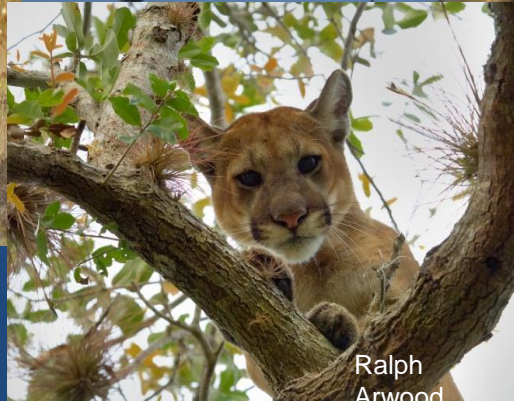
Steve



© Ron Niebrugge



NPS



Ralph
Arwood



Dean
Biggens



© kootenaynaturephotos.com

National Wildlife Refuges in Florida



Arthur R. Marshall Loxahatchee NWR

- Established in 1951 by the Migratory Bird Conservation Act of 1929 for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.
- A 50-year license agreement between the USFWS and the South Florida Water Management District allows the USFWS to manage Water Conservation Area 1 as a national wildlife refuge.
- Purpose within license agreement...to promote the conservation of wildlife, fish and game, and for other purposes embodying the principles and objective of planned multiple land use.



Arthur R. Marshall Loxahatchee NWR

- ❖ Annual Visitation is roughly 300,000
- ❖ Hunting – Waterfowl and Coot hunt for November through January (374)
- ❖ Fishing – Year round fishing and by some of the South Florida angling community the best bass fishing south of the lake (46,591)
- ❖ Wildlife Observation and Wildlife Photography – continue to be a very popular activities (120,431)
- ❖ Interpretation – Volunteers offer guided walks, talks, and canoe trips (503)
- ❖ Environmental Education – Staff works with educators (formal and non-formal), students and provide teacher in-service classes (7,230)



Friends Groups

Loxahatchee NWR is extremely fortunate to have three (3) friends groups

- ❖ Friends of the A.R.M. Loxahatchee NWR –

The purpose of the Friends is to promote a better understanding and appreciation of the natural history and environment of South Florida, the Arthur R. Marshall Loxahatchee National Wildlife Refuge and the entire Everglades system.

- ❖ Audubon Society of the Everglades –

The mission is to promote the conservation of wildlife and the natural environment and to advance understanding of our place in the total ecological system.

- ❖ Marshall Foundation–

is to develop, promote, and deliver science-based education and public outreach programs central to restoration of the greater Everglades ecosystem and its historic “River of Grass.”

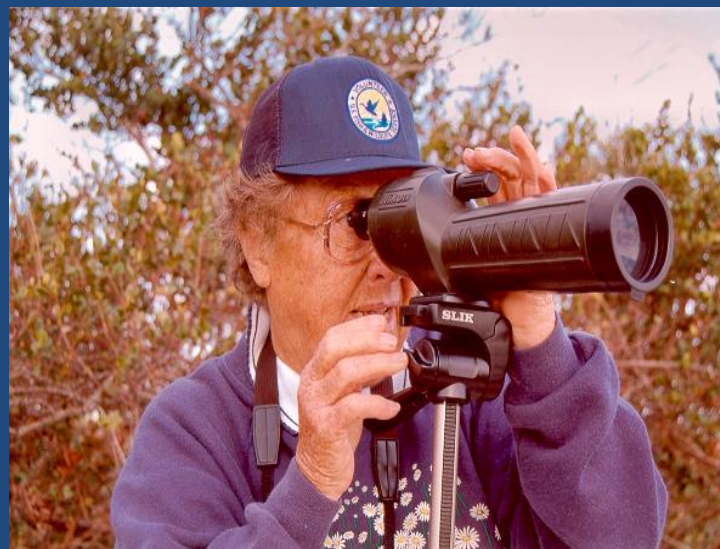
Friends Group Activities

- ❖ Friends of the A.R.M. Loxahatchee NWR –
Annual photo and art contest,
produce quarterly Gator Tales,
produce yearly calendar using
photo contest winners
- ❖ Audubon Society of the Everglades –
Refuge Keeper since their inception,
originator of yearly outreach event,
monthly walking bird trips
- ❖ Marshall Foundation–
Annual seed harvest, annual
disadvantaged youth photo event,
assist with education programming



Volunteers

- ❖ Loxahatchee Refuge LOVES its volunteers.
- ❖ The Refuge counted approximately 150 active volunteers during 2011. Cumulatively they worked 16,119 hours.
- ❖ The Refuge has had a RV volunteer program for four years. This program is going strong and this season we have four couples participating.



Recreational Facilities

- ❖ Refuge Visitor Center –
State of the Arts exhibit room with
“Night Sounds” room, virtual airboat
tour, refuge introductory video, and
Friends Gift Shop.
- ❖ Walking Trails –
Cypress Swamp Boardwalk of .4 mile
and Marsh Trail of .8 mile.
- ❖ Bike Trail –
Twelve mile bike trail between
Headquarters Area and Hillsboro Area.
- ❖ Canoe Trail – 5.5 mile canoe trail off
Headquarters Area boat ramps
- ❖ Fishing and Boating – All three
entrances have boat ramps for fishing
and boating



Children and Nature

- ❖ Children and Nature Initiative
- ❖ Kids are spending less time outdoors than they did 20 years ago the an average child spends 90%. percentage of time indoors
- ❖ Goal: connect children with nature for health benefits
- ❖ Creates a nation-wide network of Nature Champions: build capacity among pediatric health care providers to be leaders in prescribing nature



Everglades Day

February 8, 2014

- Everglades Day is a partnership between the Refuge, Friends of the Refuge, and Audubon SE and was created to promote an awareness and understanding of the importance of this fragile Everglades ecosystem to ALL South Floridians. This annual event uses science, art, music, and interactive programs to educate the public about the importance of this world-renowned water resource.



Summary of Hunt

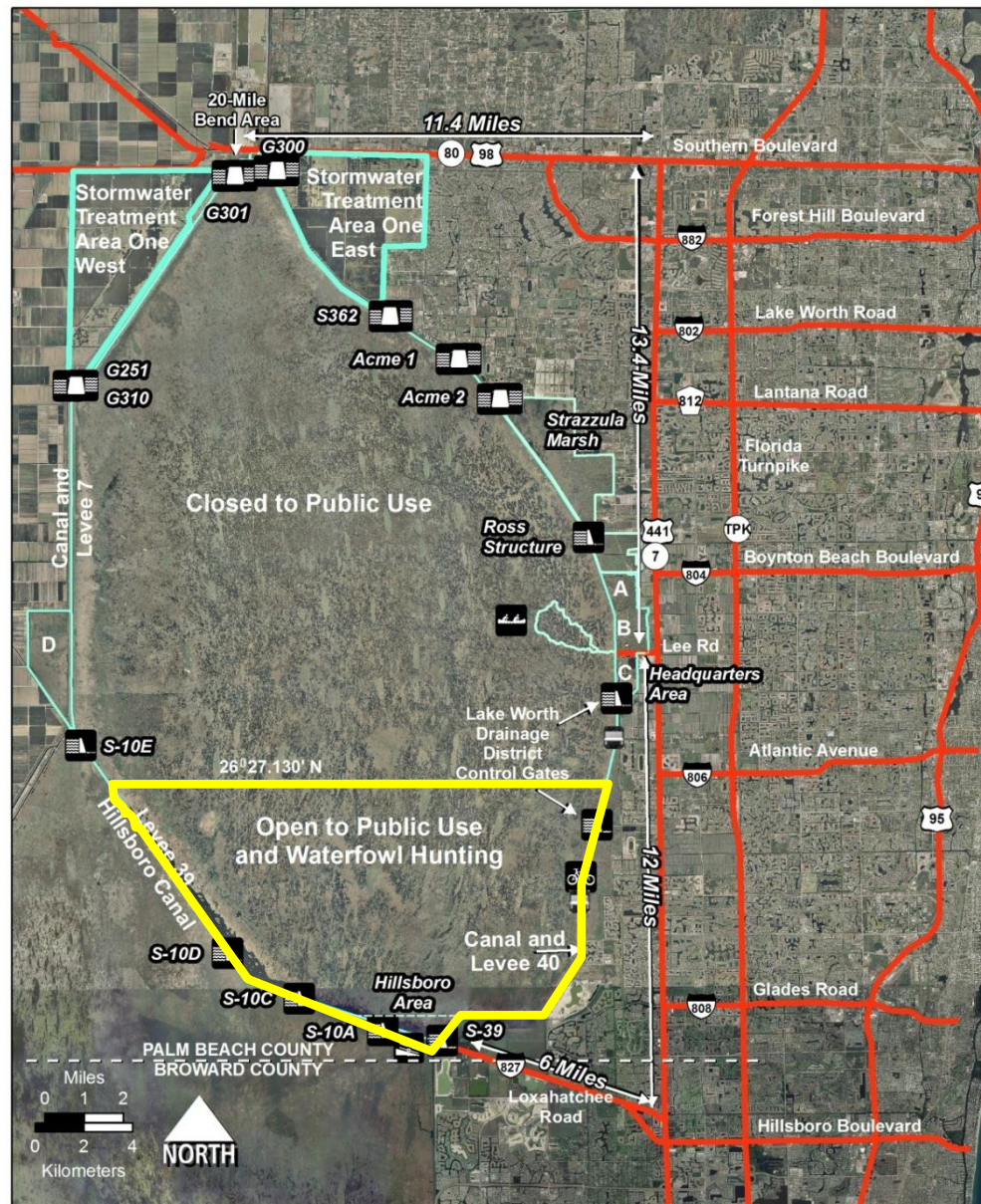
- The Refuge's first hunt will consist of a limited alligator hunt scheduled for the fall of 2014.
- The alligator harvest quota for the Refuge was developed, in part; using modeling procedures developed and used by FWC staff.
- It is anticipated that a total of eleven permits will be issued.
- Two alligators may be harvested per permit, totaling 22 alligators.
- Hunting opportunities available to the public should not have a substantial effect on alligator abundance or distribution due to the low-to-moderate hunting pressure on the Refuge and the established sanctuary area.

Season and Timing

- Alligator hunting will be limited to specific weekends from August 15 through November 1 and will not coincide with waterfowl hunting.
- The alligator hunt will be structured like the FWC's program used on the STAs, and will take place as follows: one hour before sunset on Friday night through one hour after sunrise Saturday morning, and one hour before sunset on Saturday night through one hour after sunrise Sunday morning.
- Alligator hunting shall be permitted the first two weekends during Harvest Period 1 (August) and the first two weekends during Harvest Period 2 (September). Following the close of Harvest Period 2, the remaining weekends in October will be open for alligator harvest permittees that possess unused CITES tags.
- Additional weekends per Harvest Period or weekdays may be added in the future if there is demand and resources are available. Specific dates for the alligator hunt will be provided on the harvest permit.

Hunter Access

- Hunters will use the Hillsboro boat ramp to launch authorized boats, and will stay within the existing hunt boundary.
- Although the initial alligator hunt will be held strictly out of the Hillsboro boat ramp, the Refuge may consider opening the Headquarters Area (Lee Road) and 20 Mile Bend to the perimeter canals in the future.
- Approximately 21% (30,000 acres) of the Refuge is available for hunting during the season, leaving up to 79% of the Refuge for alligators to forage and rest (sanctuary area) depending on environmental conditions.



Imagery based on Palm Beach County 2006 Aerial Photographs
Published August 11, 2008
Red Lines = 2008 Roads

Hunt Methods

- Alligators may be taken using hand held snares, harpoons, gigs, snatch hooks, artificial lures, manually operated spears, spear guns, and crossbows.
- Alligators may not be taken using baited hooks, baited wooden pegs, or firearms. Bang sticks are only permitted for taking alligators attached to a restraining line.
- Once an alligator is captured, it must be killed immediately. Once the alligator is dead, a CITES tag must be locked through the skin of the carcass within six inches of the tip of the tail.
- The tag must remain attached to the alligator at all times. An alligator harvest report issued along with the hunt permit must be submitted to the Refuge within 24 hours of taking each alligator.

Proposed Changes to Fishing on the Refuge.

- The Refuge might allow commercial fishing guides to operate in the Refuge with a special use permit.
- Refuge might host up to 17 tournaments per year based depending on potential impacts and/or resource needs such as hunting season conflicts, low water levels, wild/prescribed fire, and outreach events.
- Bank fishing might be implemented in Management Compartments (A, B, C).

80% Live in urban areas



Change In Population

RACE	CHILDREN % Change < 18 2000 – 2010	ADULTS % Change >18 2000 - 2010
White	- 9.8%	- 3.4%
Hispanic	+ 38.8	+ 33.1
Black	+ 2.3	+ 4.6
Asian	+ 31.2	+ 44.2
Other	+ 31.2	+ 9.7

Visitors To National Wildlife Refuges

- Average Age 56.
- Male 58%.
- Female 42%.
- College or Technical Education.
- Median House Hold Income \$75 - \$99.

White	Hispanic	American Indian/Alaska Native	Asian	Black
96%	4%	4%	1%	1%

% of Population That Hunt or Fish 2011

Race	Hunting	Fishing	Wildlife Watching
White	7.8%	17.1%	12.2%
Black	1.4%	7.8%	2.0%
Hispanic	.8%	4.7%	4.1%
Asian/Other	1.8%	8.5%	4.0%

Definition of an Urban Refuge

- 21 National Wildlife Refuges within 25 miles of urban populations of over 500,000 people currently host 100,000 or more visitors every year.

(**Don Edwards**, **Patuxent**, **Silvio OConte**, **Forsythe**, **Loxahatchee** and Hobe Sound (Miami), **Great Meadows and Parker River (Boston)**, **Big Branch** (New Orleans), Sachuest (Providence), Oyster Bay and Great Swamp (Newark), Desoto (Omaha), **Minnesota Valley**, Middle Mississippi (St Louis), Santa Ana and Lower Rio Grande (McAllen), John Heinz, Back Bay, Ridgefield (Portland), **Nisqually**,

- 10 of these National wildlife Refuges host over 200,000 visitors every year (bold)
- There are 84 National Wildlife Refuges within 25 miles of urban areas with 500,000 or more people.

SEQUESTRATION

- 5.2% for 10 years. 8.3% last year.
- 5.2% equals \$5,000,000 per year.

BANKING ON NATURE

Banking on Nature Report from shows the Economic Value of Refuges

For every \$1 Congress provides in funding to run the National Wildlife Refuge System, almost \$5 on average is returned to local communities, according to a new report released by the U.S. Fish and Wildlife Service. Loxahatchee NWR in particular was estimated to return \$6.81 on the dollar.